




CLEAR SKIES		CLIMATE CHANGE		ENERGY SECURITY	
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FOSSIL ENERGY

FY 2005 Budget Request

Carl Michael Smith

Assistant Secretary

Office of Fossil Energy

February 2, 2004



Meeting the President's Priorities



Clear Skies



**Climate
Change**



**Energy
Security**

Clean Coal Research Initiative

Developing
Pollution Controls

Advancing
Power Efficiency

Ensuring
Power Reliability

Gas Supply R&D
Diversifying U.S.
Resources

Carbon Sequestration
Providing New,
Affordable CO₂ Options

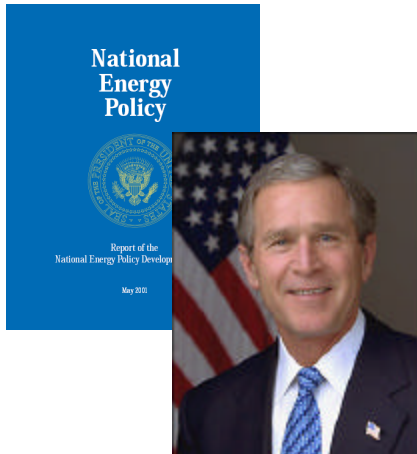
Gas Supply R&D
Exploring the
Potential of Hydrates

Hydrogen from Coal
Supplying Tomorrow's Clean Fuels

Fuel Cell R&D – Enabling Distributed Generation

Oil R&D
Sequestering CO₂ in Oil Fields Preserving U.S. Production

**Strategic Petroleum/
Heating Oil Reserves**
Protecting Consumers



Protecting the Future of Coal

A Commitment to Clean, Affordable Power from
America's Most Abundant Energy Resource

The President's Coal Research Initiative

✓ **FY05 Budget Increases to \$447 Million**

Represents a nearly 40% increase over FY04 request

Under President Bush's tenure, budget requests for coal R&D have more than doubled over historical figures¹

Appropriations for coal R&D are poised to double over historical figures² as well

¹ Compared to budget requests for the period FY98-FY01

² Assumes FY05 budget request is the amount appropriated



The President's Coal Research Initiative



"Today I am pleased to announce that the United States will sponsor a \$1 billion, 10-year demonstration project to create the world's first coal-based, zero-emissions electricity and hydrogen power plant..."

President George W. Bush
February 27, 2003

FutureGen

- ✓ **275 MW Emission-free, Coal-fired Power and Hydrogen Production Plant**

Supported by R&D efforts in carbon sequestration, hydrogen and oxygen separation, advanced turbines, fuel cells, and gasification-related technologies

- ✓ **FY05 Plan:** Consortium will begin site selection process and secure environmental permits



The President's Coal Research Initiative

A Commitment to Clean, Affordable Power from
America's Most Abundant Energy Resource

Clean Coal Power Initiative

- ✓ **Round 1 Competition:** 8 Projects, \$1.3 Billion (\$1B private/\$300M public)

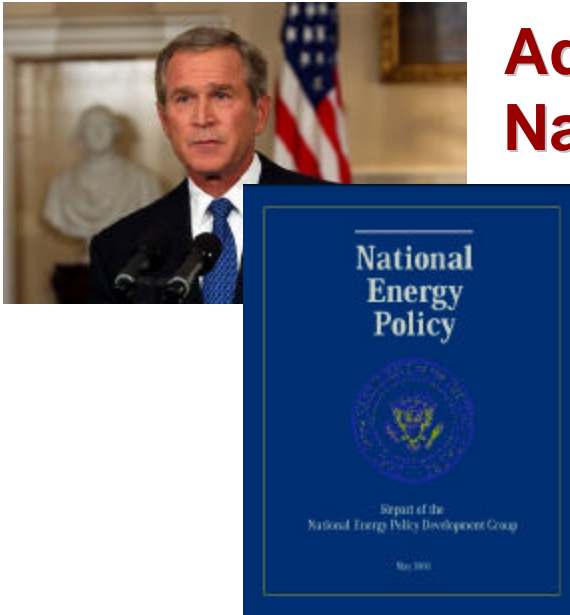
Emphasis: Pollution controls, efficiency improvements for existing plants

- ✓ **Round 2 Competition:** Solicitation (early 2004)

Emphasis: Next generation coal-fired power plants (e.g., gasification combined cycle, carbon sequestration, etc.)

Supporting Coal R&D

- ✓ **Innovations for Existing Plants:** Improved, lower cost *Clear Skies* technologies
- ✓ **Clean Power Systems:** Advanced, high efficiency systems for emission-free power plants (e.g., gasification combined cycle, multi-fuel turbines)
- ✓ **Advanced Research:** New materials, computational technologies, etc.



Administration Actions Addressing Natural Gas Supplies

- ✓ **Completed National Energy Policy in May 2001**
- ✓ **Supporting comprehensive energy legislation**
- ✓ **Facilitating expedited regulatory reviews for new natural gas supplies**
- ✓ **Initiated natural gas Summits and implementation for short-term response, Summer 2003**
- ✓ **Convened LNG Summit in December, 2003**
- ✓ **Focusing on Rocky Mountain region (primer, permitting, resource assessment, pipeline expediting, etc.)**



Petroleum Reserves

Maintaining America's Energy Readiness

Strategic Petroleum Reserve

✓ Filling America's Oil Stockpile to Record Levels

Currently approaching 640 million barrels (highest level ever)

FY 2005 Plan: Continue "royalty-in-kind" program with goal to fill SPR to full 700 million barrel capacity by December 2005

Northeast Home Heating Oil Reserve

✓ Ready to Respond to Fuel Oil Emergencies in the Northeast

Currently with 2 million barrels of heating oil at leased commercial terminals

Implemented new online "auction" system to expedite bidding process

FY 2005 Plan: Maintain readiness while reducing costs (\$3 million cost savings by recompetiting terminal contracts)

Naval Petroleum Reserve

FY 2005 Plan: Continue to operate NPR #3 -Teapot Dome; intend to transfer NPR #2 (California) to the Department of the Interior

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(Dollars in Thousands)

FY2005 Request

President's Coal Research Initiative

Research and Development	Clean Coal Power Initiative	\$287,000
	Other Coal Power R&D (Central Systems)	64,500
	Sequestration	49,000
	Coal-to-Hydrogen	16,000
	Advanced Research	30,500
	Fuel Cells	\$23,000
	Natural Gas	\$26,000
	Oil Technology	\$15,000
	Other R&D/Prog. Direction/Equipment	\$124,799
Total, Research and Development		\$635,799

Petroleum Reserves	Strategic Petroleum Reserve – Facilities	\$172,100
	Home Heating Oil Reserve	5,000
	Naval Petroleum Reserves/Elk Hills School Lands	56,000
Total, Petroleum Reserves		\$233,100